

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 8406 WO F RO-FRI	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/010276	International filing date (day/month/year) 16 September 2003 (16.09.2003)	Priority date (day/month/year) 21 September 2002 (21.09.2002)
International Patent Classification (IPC) or national classification and IPC B60K 41/02, F16F 15/18, F16D 48/08		
Applicant ZF FRIEDRICHSHAFEN AG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet. <input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of <u> </u> sheets.
3. This report contains indications relating to the following items: I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input checked="" type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 15 April 2004 (15.04.2004)	Date of completion of this report 25 January 2005 (25.01.2005)
Name and mailing address of the IPEA/EP Facsimile No.	Authorized officer Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/010276

I. Basis of the report

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed
- ☒ the description:
pages _____ 1-19 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the claims:
pages _____ 1-21 _____, as originally filed
pages _____, as amended (together with any statement under Article 19
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the drawings:
pages _____ 1/1 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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International application No.

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IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.
- ☐ paid additional fees.
- ☒ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☒ complied with.
- ☐ not complied with for the following reasons:

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☐ all parts.
- ☐ the parts relating to claims Nos. _____

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/10276

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	8-11, 15, 17	YES
	Claims	1-7, 12-14, 16, 18-21	NO
Inventive step (IS)	Claims		YES
	Claims	1-21	NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims		NO

2. Citations and explanations**1. This report makes reference to the following documents:**

D1: DE 195 38 784 A (LUK GETRIEBE SYSTEME GMBH) 2 May 1996 (1996-05-02)

D2: FR-A-2 598 765 (FICHTEL & SACHS AG) 20 November 1987 (1987-11-20)

D3: GB-A-2 346 351 (ROVER GROUP) 9 August 2000 (2000-08-09)

D4: DE 195 32 163 A (CLOUTH GUMMIWERKE AG) 6 March 1997 (1997-03-06)

D5: US-A-4 343 387 (HOFBAUER PETER) 10 August 1982 (1982-08-10)

D6: US-A-6 050 652 (HONUS KLAUS ET AL) 18 April 2000 (2000-04-18)

D7: US-A-4 656 883 (BENGTSSON LARS) 14 April 1987 (1987-04-14)

D8: DE 100 41 387 A (DAIMLER CHRYSLER AG) 7 March 2002 (2002-03-07)

D9: US-B-6 314 3421 (BELL DALE ET AL) 6 November 2001 (2001-11-06)

D10: WO 01/56827 A (RAAD BERNARD A; PACIFIC SCIENT ELECTRO KINETIC (US)) 9 August 2001 (2001-08-09)

D11: US-A-5 964 509 (NAITO YASUO ET AL) 12 October

1999 (1999-10-12)

2. The present application fails to meet the requirements of PCT Article 33(1) because the subject matter of claims 1 and 13 is not novel within the meaning of PCT Article 33(2).

2.1 D1 discloses a (claim 1):

method for reducing vibrations in a motor vehicle in which the disturbing vibrations are determined by a control device by means of suitable sensors and, when predetermined threshold values are exceeded, at least one device is activated by the control device in such a way that the disturbing vibrations are entirely eliminated or at least dampened in their amplitude, wherein the at least one device acts on at least one rotating component in the vehicle drive train in such a way that, when vibrations occur, the component(s) is (are) continuously or periodically stopped in its (their) rotational movement or activated to a compensating vibration.

2.2 Note: with regard to the "control device", see D1, claim 13:

"that a control or monitoring system can be **controlled** in a targeted manner... as a function of measured signals and/or **system input variables** in the individual regions of the slip".

2.3 D1 also discloses a (claim 13):

device for carrying out the method according to at least one of claims 1 to 12, wherein a control device is connected to speed sensors (16, 17) and/or

vibration sensors via sensor lines in order to detect disturbing vibrations in the drive train and/or in the entire vehicle, and communicates by means of signals via control lines (9) with devices (3) with which vehicle components can be made to vibrate or slowed down in such a way that their vibration frequency, vibration amplitude and vibration phase position are configured relative to the frequency, amplitude and vibration phase position of the disturbing vibrations such that, when superimposed on the disturbing vibrations, the amplitudes of the disturbing vibrations are at least dampened.

3. Dependent claims 2 to 12 and 14 to 21 do not contain any features which, in combination with the features of any claim to which they refer, meet the PCT requirements for novelty and inventive step (see D2 to D11 and the corresponding passages cited in the search report).
4. Note: Auxiliary requests are not allowable in the PCT proceedings.